

Notice of Allowability

Application No.

09/497,238

Applicant(s)

KOKKINEN, HEIKKI

Examiner

Michael W. Hoyer

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to Amendment filed on 10/31/05.
2. ☒ The allowed claim(s) is/are 10 and 17-28 (renumbered as 1-13).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 08/979,489.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/18/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 6 of the Remarks section of the Amendment filed on October 31, 2005, with respect to the rejection of claims 17-22 under 35 U.S.C. § 102(e) as being anticipated by Citta et al (USPN 5,956,325) have been fully considered and are persuasive, and Applicant's arguments on page 7, with respect to the rejection of claims 23-28 under 35 U.S.C. § 103(a) as being unpatentable over Citta et al (USPN 5,956,325), in view of Williams (USPN 5,745,836) have been fully considered and are persuasive. Therefore, the rejections have been withdrawn.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: Claims 10 and 17-28 are allowed.

As for independent claim 10, the prior art, alone or in combination, does not teach or fairly suggest all of the claimed limitations of claim 10 as a whole, and more specifically, the claimed ...slots of a defined slot length that are assigned...to distribute the use of data transmission capacity...the slots are further divided into mini slots, wherein the length of three mini slots plus a guard byte is the same as the defined slot length. As for the most pertinent prior art of record, the Ghaibeh (USPN 5,956,338) reference discloses an 11 byte polling mini slot as shown in Fig. 13 and a plurality of upstream mini request slots 222 within a 68 byte polling slot 58, but does not teach or suggest that the length of three mini slots plus a guard byte is the same

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as the defined slot length. In the Applicant's invention the features as described above are specifically disclosed in claim 10.

As for independent claim 17, the prior art, alone or in combination, does not teach or fairly suggest all of the claimed limitations of claim 17 as a whole, and more specifically, the claimed method for transmitting digital data in an additional channel of a cable television system applying time division multiple access...which slots are further divided into mini slots, the use of which is controlled by the indications transmitted downstream, wherein... indications transmitted downstream are located in control bytes of at least two slot pairs of a downstream frame and comprise at least indicator flag bits, an upstream transmission permit field and one of the following: a collision feedback field, an operations, administration and maintenance data field. As for the most pertinent prior art of record, the Citta et al (USPN 5,956,325) reference discloses the claimed, "method for transmitting digital data in an additional channel of a communications system applying time division multiple access (TDMA)", as met by a CATV system 10 with a common communications channel, including downstream communication from the headend 12 to the subscriber stations 14₁-14_n and upstream communication from the subscriber stations to the headend, according to a TDMA format (see Fig. 1, col. 1, lines 11-15, 17-24, and 35-52, and col. 4, lines 35-46). The claimed, "in which slots of a defined slot length are assigned for terminal equipment in order to distribute the use of data transmission capacity to the equipment, and the slots in the communications system are controlled by use indications transmitted downstream, which slots are further divided into mini slots, the use of which is controlled by the indications transmitted downstream", is met by col. 2, line 62 – col. 3, line 33 and col. 4, line 47 – col. 5, line 19. The claimed, "wherein mini slots are used for the

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transmission of reservation messages which the terminal equipment use for informing a central configuration that the terminal equipment wish to reserve data transmission capacity”, is met by one or more subscriber stations using mini slots to request a number of reserved slots which is transmitted upstream to the headend in order to request a reservation of slots or data transmission capacity/bandwidth (see col. 2, lines 6-18, col. 4, line 47 – col. 5, line 62 and col. 6, lines 30-35). However, Citta et al does not teach or suggest that the indications be located “in control bytes of at least two slot pairs of a downstream frame”, while Citta only discloses that the downstream data frame has four sections. In addition, the disclosure of Citta does not mention slot pairs of the downstream frame; neither does it say that the indications would be located in control bytes of at least two slot pairs. Furthermore, the claim requires there to be “indicator flag bits”, which Citta does not disclose, because it only mentions a range parameter, a mini slot parameter, acknowledgements of reservation requests and data. Finally, the claim requires there to be either a “collision feedback information” field or an “operations, administration and maintenance (OAM) data field”, whereas, Citta only discloses a “data” field, which is not the same as the specifically recited OAM data field and also not the same as a collision feedback information field. In the Applicant’s invention the features as described above are specifically disclosed in claim 17.

As for independent claims 18-19, the claimed central configuration system and terminal equipment system are allowed based on similar reasons as described above for independent claim 17.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoyer whose telephone number is **571-272-7346**.

The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolator, etc.) as follows:

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Alexandria, VA 22314

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Or faxed to: 571-273-8300

Hand-delivered responses should be brought to the Customer Service Window at the address listed above.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Michael W. Hoyer
January 20, 2006



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600